

Amendments to the Drawings:

The attached sheet of drawings includes new Figure 3. Diagrammatic representations of a system and a circuit board are included in this Figure.

REMARKS

Drawings

A new drawing sheet is attached hereto together with added diagrammatic representations of a system and a circuit board. The specification has been amended to include reference to these elements.

Specification

The specification has been amended to improve clarity and precision. The original intent is implicit in the original wording because electrical arcs are known to jump smaller distances more readily than larger distances.

Claim Rejections -35 USC §112

The rejection includes:

Regarding claim 63, lines 2-4 are unclear. What does applicant mean of "second edge of the trace and first edge of the second cap are both substantially equal to X"?

What is a dimension or value of X to be comparable to either the second edge of the trace and the first edge of the second cap.

Rejected claims 67, 72, 77, and 88 are similar to claim 63.

Please clarify.

Claim 63 has been amended to improve clarity and precision herein by adding the term "the" and by reformatting to emphasize the meaning:

63. (currently amended) The circuit protection system as described in claim 62 wherein the dimension of the space intermediate

(1) said first edge of said trace and said first edge of said first end cap and

(2) said second edge of said trace and said first edge of said second end cap are both substantially equal to X.

It is respectfully submitted that the asserted issue relates to specific words out

of the context in which they appear. The words when taken in context are fully supported by both the original specification and the specification as amended in the response dated 10/11/06 that included:

The meaning of the words is most apparent by consideration of the paragraph on page 8 of the specification that is amended herein.

Claim Rejections -35 USC §102

The rejection is:

5. Claims 62-70,76-84 are rejected under 35 U.S.C. 102(e) as being anticipated by Devoe (U.S. Patent 6,690,558)
As to claims 62, 76, Devoe discloses a high power resistor device (30; 40) as shown in figures 3A-3C comprising:
a printed circuit board (48, column 4, line 24) having a SMT component (30; 40) mounted on, the component (30; 40) having first and second end caps (14), and each caps having a first edge;
a conductive trace (46, see figure 3C) formed on the PCB (48) having first and second opposed edges extending intermediate said first and second caps (14), the edges of the trace (46) being defined a plane, see figure 3C and intersecting the first edge of the first cap (14) and intersecting the first edge of the second cap (14), the edge of the trace (46) disposed in parallel spaced relative to the edge of the first and second caps respectively.
As to claims 66,80, Devoe discloses a high power resistor device (30; 40) as shown in figures 3A-3C comprising:
a printed circuit board (48, column 4, line 24) having first and second SMT components (30,40) mounted on, the components (30, 40) having first and second end caps (14), and each caps having a first edge;
a conductive trace (46, see figure 3C) formed on the PCB (48) having first and second opposed edges extending intermediate said first and second caps (14), the edges of the trace (46) being defined a plane, see figure 3C and intersecting the first edge of the first cap (14) and intersecting the first edge of the second cap (14), the edge of the trace (46) disposed in parallel spaced relative to the edge of the first and second caps respectively, and said plane intersecting said first edge of said first end cap of said second surface mounted component (40) and intersecting said first edge of said second end cap of said second surface mounted component, said first edge of said trace being disposed in parallel spaced relation to said first edge of said first end cap of said second surface mounted

component and said second edge of said trace being disposed in parallel spaced (sic)

Regarding claims 63-65, 67-70, 77-79, and 81-84, Devoe discloses the second edge of the trace being substantially the same to the first edge of the second cap.

Each independent claim in the rejected claims includes the following:

“...a conductive trace on said printed circuit board having first and second opposed edges extending intermediate said first and second end caps, said first and second opposed edges being coplanar and thereby defining a plane, said plane intersecting said first edge of said first end cap and intersecting said first edge of said second end cap, said first edge of said trace being disposed in parallel spaced relation to said first edge of said first end cap and said second edge of said trace being disposed in parallel spaced relation to said first edge of said second end cap ...” (emphasis added)


The trace 46 in Devoe is not coplanar with the end caps. The plane defined by the edges of the trace do not intersect the end caps. The trace does not extend intermediate end caps. Instead, the trace extends in a plane at a lower elevation. Thus, the reference does not have the same structure. In addition the trace 46 is attached to the end caps by solder and thus does not have a spacing that is necessary for the function of present invention. Furthermore, the trace in Devoe is used to connect the device to the board. Any surge will inherently pass through that trace. Thus, any attempt to use that trace as circuit protection would be like trying to protect a barn with a transmission line (that is subject to being hit by lightening) by using the transmission line as a lightening rod!

The allowed claims are noted.

It is respectfully submitted that the claims submitted herewith (including withdrawn claims) are allowable and such action is requested.

Should a petition for an Extension of Time be necessary for the timely reply to the outstanding office action (or such a petition has been made and an additional extension is necessary) petition is hereby made in the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account Number 19-2635 under Attorney Docket Number H0006069-0555.

Respectfully submitted,



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